Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.-4. (Canceled).

5. (Currently Amended) A semi-conductor component comprising:

a semiconductor body having a matrix formed from a first semi-conductor material having a first lattice constant, the matrix comprising a sequence of layers,

wherein each layer of the matrix comprises several sub-monolayer islands containing a second semi-conductor material having a second lattice constant different from the first lattice constant, ~~and~~

wherein the sub-monolayer islands are separated from the one another and embedded in the matrix formed from the first semi-conductor material, and

wherein the sub-monolayer islands within each layer are located in a common plane perpendicular to a growth direction for the sequence of layers.

6. (Previously Presented) The semi-conductor component of claim 5, wherein the second semi-conductor material is more highly dopable than the first semi-conductor material.

7. (Previously Presented) The semi-conductor component of claim 5, wherein the separation between consecutive layers of the sub-monolayer islands decreases toward a main surface of the semiconductor body.

8. (Previously Presented) The semi-conductor component of claim 5, further comprising a layer of the second semi-conductor material completely covering a main surface of the semiconductor body.

9. (Previously Presented) The semi-conductor component of claim 5, wherein the first semi-conductor material comprises ZnSe and the second semi-conductor material comprises ZnTe.

10. (Previously Presented) The semi-conductor component of claim 8, wherein the layer completely covering the main surface has a thickness less than 10 nm.

11. (Previously Presented) The semi-conductor component of claim 5, wherein a main surface of the semiconductor body has a doping level greater than $10^{19}cm^{-3}$.

12. (Previously Presented) The semi-conductor component of claim 7, wherein the main surface of the semiconductor body has a doping level greater than $10^{19}cm^{-3}$.

13. (Previously Presented) The semi-conductor component of claim 6, wherein the separation between consecutive layers of the sub-monolayer islands decreases toward a main surface of the semiconductor body.

14. (Previously Presented) The semi-conductor component of claim 7, further comprising a layer of the second semi-conductor material completely covering the main surface of the semiconductor body.

15. (Previously Presented) The semi-conductor component of claim 13, further comprising a layer of the second semi-conductor material completely covering the main surface of the semiconductor body.

16. (Previously Presented) The semi-conductor component of claim 5, wherein the first semi-conductor material comprises ZnSe.

17. (Previously Presented) The semi-conductor component of claim 5, wherein the second semi-conductor material comprises ZnTe.

18. (Currently Amended) A semi-conductor component comprising:

a matrix comprising a first semi-conductor material having a first lattice constant, the matrix having a sequence of layers,

wherein each layer of the matrix comprises several sub-monolayer islands containing a second semi-conductor material having a second lattice constant different from the first lattice constant, ~~and~~

wherein the sub-monolayer islands are separated from the one another and embedded in the matrix, and

wherein the sub-monolayer islands within each layer are located in a common plane perpendicular to a growth direction for the sequence of layers.

19. (Currently Amended) A semi-conductor component comprising:

a matrix comprising ZnSe and defining a sequence of layers, wherein each layer of the matrix comprises several sub-monolayer islands comprising ZnTe, the sub-monolayer islands being separated from the one another and embedded in the matrix; and a layer comprising ZnTe covering the surface of the matrix, and

wherein the sub-monolayer islands within each layer are located in a common plane perpendicular to a growth direction for the sequence of layers.